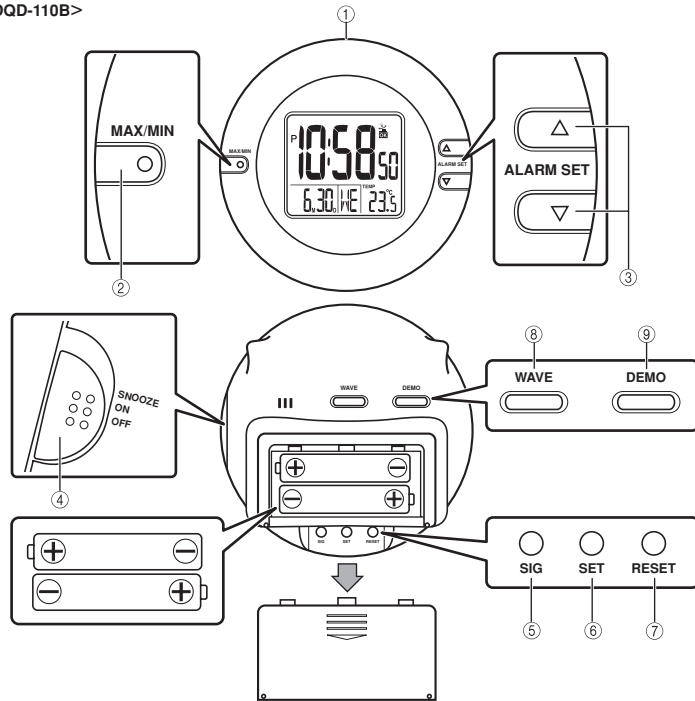


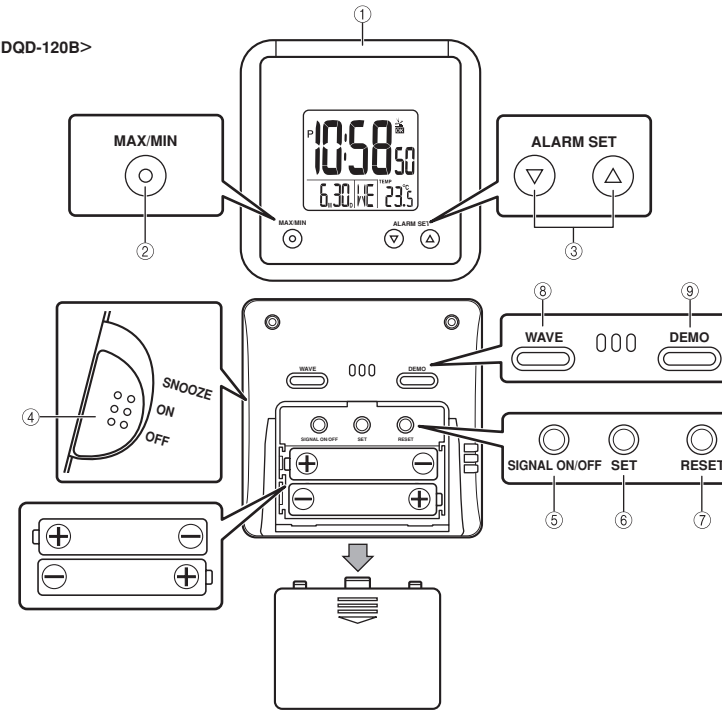
Operation Guide DQD110/120B

ILLUSTRATION

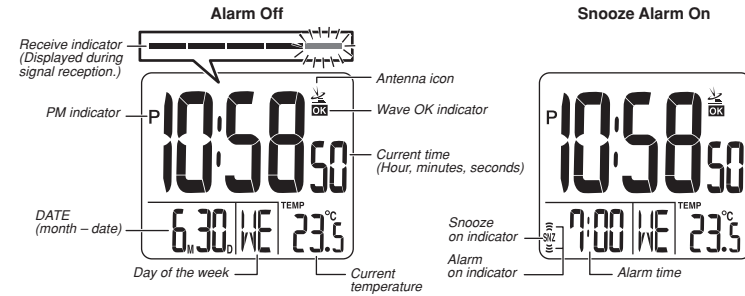
<DQD-110B>



<DQD-120B>



- A sticker is affixed to the glass of this clock when you purchase it. Be sure to remove the sticker before using the clock.
- Depending on its model number, the configuration of your clock may differ somewhat from that shown in the illustration.

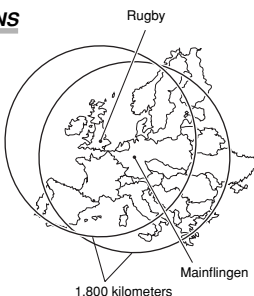


GENERAL GUIDE

- ① **SNOOZE/LIGHT button**
 - Press this button to illuminate the display for about three seconds.
 - Pressing this button while the alarm is sounding stops the alarm.
- ② **MAX/MIN button**
Press this button to display the high and low temperature values.
- ③ **Alarm Time Set buttons**
Use these buttons to change the alarm time or current time setting.
- ④ **Alarm Mode selector**
SNOOZE: Snooze alarm on
ON: Alarm on
OFF: Alarm off
- ⑤ **SIG button (SIGNAL ON/OFF button)**
Press this button to toggle the Hourly Time Signal on and off.
- ⑥ **SET button**
Use this button when setting the current time.
- ⑦ **RESET button**
Press this button to reset the clock after replacing its batteries.
- ⑧ **WAVE button**
Press this button to receive the time calibration signal and adjust timekeeping.
- ⑨ **DEMO button**
Press this button to sound the alarm.

TIME CALIBRATION SIGNAL RECEPTION PRECAUTIONS

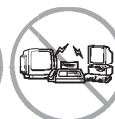
- This clock can receive the time calibration signals transmitted from Mainflingen, Germany and Rugby, England. It automatically selects reception from the transmitter whose signal is strongest.
Mainflingen: Signal reception is possible within approximately 1800 km of the transmitter.
Rugby: Signal reception is possible within approximately 1800 km of the transmitter.
- Even when the clock is within the reception range, signal reception is impossible if the signal is blocked by mountains or other geological formations between the clock and signal source.
- Signal reception is affected by weather, atmospheric conditions, and seasonal changes.
- The time calibration signal is bounced off the ionosphere. Because of this, such factors as changes in the reflectivity of the ionosphere, as well as movement of the ionosphere to higher altitudes due to seasonal atmospheric changes or the time of day may change the reception range of the signal and make reception temporarily impossible.
- Reception is best when the back of the clock is facing in the direction of the transmitter. As a general rule, point the back of the clock towards the transmitter that is closest to your location. If you experience reception problems, try pointing it in the direction of the other transmitter. Note, however, that moving the clock while the time calibration signal receive operation is taking place will make stable reception impossible.
- Think of the clock as acting like a TV or radio when it is receiving the calibration signal. When receiving indoors, move to a location as near as possible to a window. Proper signal reception can be difficult or even impossible under the conditions listed below.



Inside, among buildings, or near neon signs



Inside a vehicle



Near refrigerators or other household appliances, near office equipment, mobile phones or wireless LAN devices.



Near a construction site, airport, or other sources of electrical noise, underground or in tunnels, near railroads, highways, or radio stations with interfering frequencies.



Near high-tension power lines



Among or behind mountains

- Signal reception is normally better at night than during the day.
- Radio interference can make signal reception impossible.
- Strong electrostatic charge can result in the wrong time being set.

USING THE CLOCK 1

This clock can receive the time calibration signals transmitted from Mainflingen, Germany and Rugby, England. It automatically selects reception from the transmitter whose signal is strongest.

Any of the following procedures can be used to set current date and time.

- Auto receive of the time calibration signal
- Manual receive of the time calibration signal
- Manual setting without using the time calibration signal

Auto Receive

- This clock performs a 1-minute receive operation each hour.
- A signal receive operation takes from two to fourteen minutes under good signal conditions.
- As the clock receives a time calibration signal, current signal strength is indicated by the receive indicator, which is a horizontal line above the current time.
- A longer receive indicator line means better signal reception.

Antenna Icon

The antenna icon appears when at least one signal receive operation is successful during a day. The antenna icon is cleared at 2 a.m. and 3 a.m. each day, and will reappear as soon as a subsequent signal receive operation is successful.

Wave OK Indicator

The Wave OK indicator is displayed when there has been a successful receive operation within the last hour. This indicator disappears at the top of each hour, or when you perform a manual receive operation.

Unsuccessful Signal Reception

The antenna icon disappears from the display if no signal receive operation is successful during a continuous 24-hour period. If this happens, try changing the position or orientation of the clock, and press the **WAVE** button (Ⓢ) to receive again.

Manual Receive

- Press the **WAVE** button (Ⓢ) to start a calibration signal receive operation.
- Use the **WAVE** button (Ⓢ) to perform a receive operation after replacing the clock's batteries or if the auto receive operation was not performed correctly for some reason.
- The antenna icon appears when signal reception triggered by the **WAVE** button (Ⓢ) is successful.

Important!

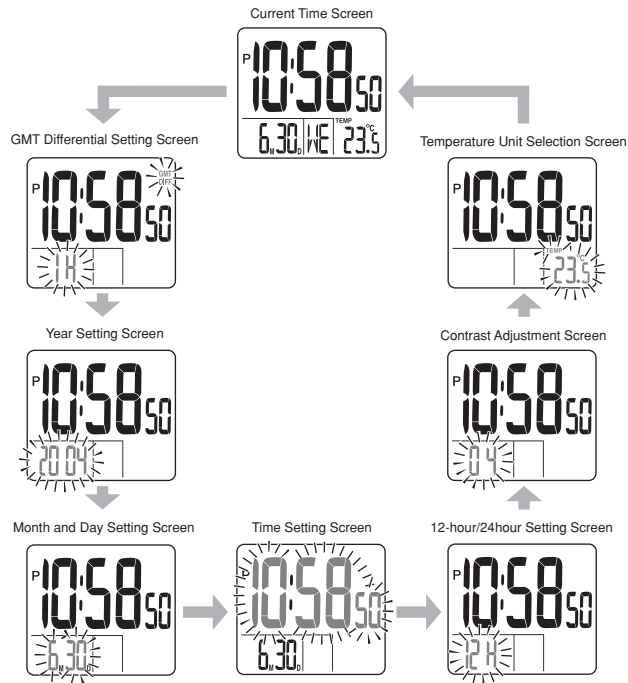
- Do not perform any button or switch operation while a signal receive operation is in progress.
- The time calibration signal includes both Standard Time and Daylight Saving Time (summer time) data.
- The DST indicator appears on the display when Daylight Saving Time (summer time) data is received.
- Note that Daylight Saving Time (summer time) is turned on and off in accordance with the received time calibration signal only. You cannot turn it on or off manually.

USING THE CLOCK 2

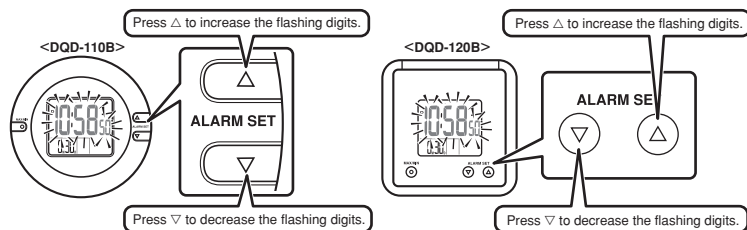
Setting the Time and Date Manually

When using the clock in an area that is outside of the range of the transmitter or in an area where signal reception is impossible for some reason, you need to manually adjust the time setting as required.

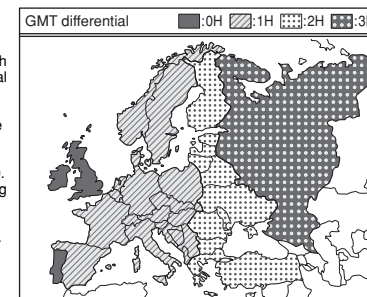
1. Press the **SET** button (⑥) to cycle through the setting screens as shown below.



2. While the screen you want is on the display, use the **Alarm Time Set** buttons (③) to change the digits that are flashing.



- Holding down Δ or ∇ changes the flashing digits at high speed.
- Your GMT differential is a value that indicates the time difference between your current location and Greenwich Mean Time (GMT). You can find out the GMT differential of your location by checking the nearby map.
- You can set the year in the range of 2000 to 2099. The day of the week is set automatically in accordance with the date setting.
- Pressing Δ or ∇ while the Time Setting Screen is on the display causes the seconds count to be reset to 00.
- Each press of Δ or ∇ while the 12-hour/24-hour Setting Screen is on the display toggles between 12-hour and 24-hour timekeeping.
- You can select one of 16 levels for the contrast setting. Select the setting that makes the display easy to read.
- While the Temperature Unit Selection Screen is on the display, press the Δ or ∇ button to toggle between $^{\circ}\text{C}$ (Celsius) and $^{\circ}\text{F}$ (Fahrenheit).



- After making the settings you want, use the **SET** button (⑥) to display the Current Time Screen.
- The clock automatically returns to the Current Time Screen if you leave a setting screen on the display for about three minutes without performing any operation.

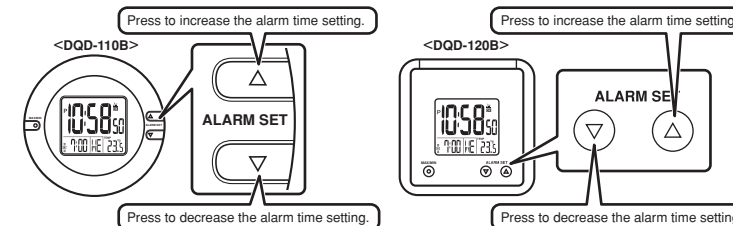
USING THE ALARM 1

The alarm sounds when the alarm time you set is reached. You can also use the **Alarm Mode selector** (④) to select the snooze alarm feature.

Setting the Alarm Time

Use the **Alarm Time Set** buttons (③) to set the alarm time.

Pressing the **Alarm Time Set** buttons (③) causes the alarm time to appear in place of the date on the display.



- Holding down Δ or ∇ changes the digits at high speed.

Turning the Alarm On and Off

Use the **Alarm Mode selector** (④) on the side of the clock to turn the alarm on and off, and to select the snooze feature.

Alarm Mode selector	Description
 SNOOZE (SNOOZE)	The alarm sounds at the preset time for one minute, and seven more times every five minutes thereafter. Even if you stop the alarm sound by pressing the SNOOZE/LIGHT button (①), the alarm operation is performed again five minutes later. <ul style="list-style-type: none"> • The indicator (SNOOZE) flashes on the display to indicate that the snooze feature is activated.
 ON (ON)	The alarm sounds at the preset time for one minute.
 OFF	The alarm does not sound.

- The alarm time appears in place of the date on the display whenever the **Alarm Mode selector** (④) is set to ON or SNOOZE.
- The alarm sound changes over four levels as it sounds.

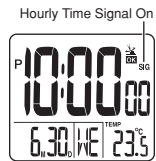
USING THE ALARM 2

Stopping the Alarm

- When alarm is sounding, press the **SNOOZE/LIGHT** button (①) to stop it. When the snooze feature is turned on, the alarm will sound again in about five minutes.
- To turn off the snooze feature, slide the **Alarm Mode selector** (④) to OFF.

Using the Hourly Time Signal

- When turned on, the Hourly Time Signal sounds on the every hour on the hour from 6:00 a.m. to midnight (19 times per day).
- Press the **SIG** button (⑤) to toggle the Hourly Time Signal on and off.
- The SIG indicator indicates that the Hourly Time Signal is turned on.



THERMOMETER FUNCTIONS

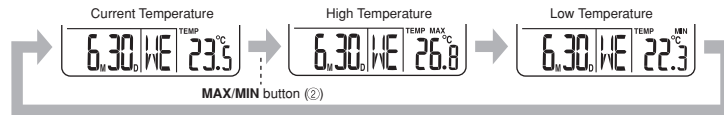
- A built-in sensor measures temperature and shows the measured value on the display.
- The displayed temperature is replaced by "LO" for temperatures -20.0°C (-4.0°F) and lower, and "HI" for temperatures 50.0°C (122.0°F) and higher.
- Though temperature readings are displayed up to 0°C (32°F) and greater than 40.1°C (104.1°F), note that such readings are actually outside the guaranteed temperature range of this clock.

Switching between Celsius and Fahrenheit

- See "Setting the Time and Date Manually" for information about selecting Celsius ($^{\circ}\text{C}$) or Fahrenheit ($^{\circ}\text{F}$) as the temperature unit.

High Temperature and Low Temperature Memory

- The following data is stored in memory automatically.



- Holding down the **MAX/MIN** (②) button for about two seconds starts auto display, which cycles automatically between the current, high, and low temperatures. To exit auto display, press the **MAX/MIN** button (②) again.
- High temperature and low temperature memory is cleared each day at midnight.

USING THE LIGHT

Pressing the **SNOOZE/LIGHT** button (①) turns on the light and illuminates the display for easy reading in the dark.

Important!

- Overuse of the light can shorten battery life.

BATTERY REPLACEMENT

Replace batteries whenever the display of the clock becomes dim and difficult to read.

1. Pressing down lightly on the battery compartment cover, slide it downwards and remove it.
2. Remove both of the old batteries.
3. Load two new batteries. Make sure that their positive (+) and negative (–) ends face in the correct directions. If you load batteries incorrectly, they can burst and damage the clock.
4. Press the **RESET** button (⑦). Be sure to press the **RESET** button (⑦) after replacing batteries.
5. Replace the battery compartment cover.

Battery precautions

- Keep batteries out of the reach of small children. If a battery is accidentally swallowed, contact your physician immediately.
- Be sure to load the batteries with their positive (+) and negative (–) ends facing correctly.
- Never mix old and new batteries, or batteries of different brands.
- Never charge the batteries that come with the clock.
- Should batteries ever leak while in the clock, wipe out the fluid with a cloth, taking care not to let any get onto your skin.
- Replace the batteries at least once a year, even if the current batteries are working properly.
- The batteries that come with the clock lose some of their power during transport and storage.